



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C12N 15/31, 15/63, A23K 1/00		A3	(11) International Publication Number: WO 99/67356
		(43) International Publication Date: 29 December 1999 (29.12.99)	
(21) International Application Number: PCT/EP99/04416		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RQ, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: 25 June 1999 (25.06.99)			
(30) Priority Data: 98305033.7 25 June 1998 (25.06.98) EP			
(71) Applicant (for all designated States except US): GIST-BROCADES B.V. [NL/NL]; Wateringseweg 1, P.O. Box 1, NL-2600 MA Delft (NL).			
(72) Inventors; and (75) Inventors/Applicants (for US only): POUWELS, Pieter, Hendrik [NL/NL]; Delftweg 14, NL-2289 AJ Rijswijk (NL); VAN LUIJK, Nicole [NL/NL]; Wageningenberg 34, NL-3524 LR Utrecht (NL); JORE, Johannes, Petrus, Maria [NL/NL]; Wateruit 9, NL-2804 PA Gouda (NL); LUITEN, Rudolf, Gijsbertus, Marie [NL/NL]; Akkerhoombloem 26, NL-2317 KR Leiden (NL).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RQ, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(74) Agents: WRIGHT, Simon, Mark et al.; J.A. Kemp & Co., 14 South Square, Gray's Inn, London WC1R 9SL (GB).		Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments. With an indication in relation to deposited biological material furnished under Rule 13 ^{bis} separately from the description.	
		(88) Date of publication of the international search report: 10 February 2000 (10.02.00)	
(54) Title: PROPIONIBACTERIUM VECTOR			
(57) Abstract			
<p>An endogenous plasmid of <i>Propionibacterium freudenreichii</i> LMG 16545 (deposited as CBS 101022), and its sequence provided. This plasmid can be used to transform <i>Propionibacterium</i> to express homologous or heterologous proteins, in the production of recombinant proteins or products of enzymes, for example vitamin B₁₂.</p>			

09720583.062501